USPS-T-30

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

POSTAL RATE AND FEE CHANGES, 2000	Docket No. R2000-1

DIRECT TESTIMONY
OF
SCOTT J. DAVIS
ON BEHALF OF
UNITED STATES POSTAL SERVICE

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Direct Testimony

Of

Scott J. Davis

AUTOBIOGRAPHICAL SKETCH

My name is Scott J. Davis. I am an Economist in Special Studies within Activity-Based Management, Finance at Postal Service Headquarters. I began working for the Postal Service in 1998. My primary responsibilities include developing costs for Special Services; assisting with the development of cost models for flat-shaped mail; and analyzing mail preparation requirements and discount eligibility rules. I have spent time in field offices while conducting cost studies and participating in committees. I have visited over thirty postal facilities including Associate Offices, Processing and Distribution Centers, Bulk Mail Centers, and Airport Mail Centers.

Prior to joining the Postal Service, I served as a Staff Accountant at Reston Hospital Center in Reston, VA. I performed general accounting duties including budget preparation, review of financial statements, and analysis and reconciliation of accounts.

I received a bachelor's degree in Economics from Duke University and a Master's of Business Administration degree from the School of Business at the College of William and Mary.

I. PURPOSE AND SCOPE OF TESTIMONY

The purpose of my testimony is to present estimated Test Year unit volume variable costs in support of special service fees proposed by witness Mayo (USPS-T-39). The special services covered in my testimony include: delivery confirmation, signature confirmation, certificate of mailing, certified mail, return receipts, return receipts for merchandise, restricted delivery, insured mail (including bulk insurance), collect-on-delivery, registered mail, postage meter service, and post office box key and lock changes.

Section 2 of my testimony provides updated Test Year costs for delivery confirmation service. Unit volume variable costs are estimated for both manual delivery confirmation and electronic delivery confirmation for Priority Mail and Standard Mail. This section relies partly on the methodologies and cost estimates of witness Treworgy (USPS-T-22) in Docket No. R97-1. Section 3 of my testimony provides estimated Test Year costs for signature confirmation service. The unit volume variable costs are estimated for both manual and electronic options for Priority Mail and Standard Mail.

Section 4 contains updated Test Year costs for accountable mail services. New analysis and field studies have been performed to develop costs for return receipts and return receipts for merchandise. Updates to previous studies have been performed for certificate of mailing, restricted delivery and bulk insurance.

My testimony estimates the cost effects that electronic signature capture will have on these services. These estimates are provided to witness Kashani (USPS-T-14), so that Test Year CRA costs for certified mail, insured mail, collect-on-delivery and registered mail reflect the changes in the operating environment due to the planned implementation of electronic signature capture.

Section 5 presents costs for postage meter service and Section 6 presents costs for post office box key and lock changes. Field studies were conducted to develop costs for these services.

II. GUIDE TO SUPPORTING DOCUMENTATION

In addition to this testimony, I provide Library Reference I-108 to present my detailed cost analyses, spreadsheets, and survey documentation. I do not have any other workpapers.

III. DELIVERY CONFIRMATION

A. Overview

Delivery confirmation (DC) is a special service which provides the mailer with information about the date and time a mailpiece was delivered. Information regarding the date and time of any attempted delivery is also provided. Available only at the time of mailing, delivery confirmation is offered in one of two forms: the electronic option and the retail (or manual) option. In the electronic option, the mailer is required to apply a delivery confirmation barcode to the mailpiece, submit an electronic manifest of the mailing of DC items to the Postal Service, and receive information about DC items electronically through the Internet. Eligible matter for the delivery confirmation service includes Priority Mail and Standard Mail (B), although I understand that witness Mayo is proposing to make delivery confirmation available to Standard Mail (A) as well.

This testimony contains several key changes to witness Treworgy's testimony in Docket No. R97-1 (USPS-T-22). New special studies were performed to improve estimates of the volume variable costs of using the Delivery Confirmation scanners at delivery. The "Scanning Study" in this testimony is based on the results from both witness Treworgy's "Scanning Clerk Scans One DC Mail Item" study (Docket No. R97-1, USPS-T-22, Appendix A, Data Sheet A-2) and a new engineering analysis of retrieving and returning the scanner before and after use. The engineering analysis, which applied Methods Time Measurement (MTM)

time standards to the physical motions of retrieving and returning the scanner, replaces the previous "Scanning Clerk Initializes Scanner" study (Docket No. R97-1, USPS-T-22, Appendix A, Data Sheet A-1). The costs of the initialization of the scanner are not volume variable. Regardless of the number of scans, the scanner will need to be initialized once per day.

My testimony also reflects operational changes to the delivery confirmation service. Corporate call management costs have been updated as a result of operational changes in the call centers. New supplies costs have also been ascertained to reflect the new labels in use for the delivery confirmation retail service.

Access to new information has allowed other modifications. This testimony accounts for the costs incurred in delivery when scanners malfunction. Window acceptance costs for manual service are adjusted to reflect the proportion of DC manual items that bypass window acceptance.

B. Methodology

Scanning times at delivery were determined using the application of MTM time standards. To perform this application, discrete physical motions were identified which comprise the scanning activities of retrieving the scanner, positioning the scanner for use, and returning the scanner after use. This study excludes the activity of actually performing the scan, since this is addressed independently in

the special study of parcel transaction scanning time, as presented in Docket No. R97-1. The times derived from this MTM analysis are therefore combined with the average time required per scan of 2.46 seconds (see Docket No. R97-1, USPS-T-22, Appendix A).

The MTM analysis was applied to each of the four categories of personnel (city carriers, rural carriers, box section clerks, and window clerks) that deliver DC mailpieces. USPS-LR-I-108, pp. 1-9, presents the applicable MTM standards for each of the four categories of delivery personnel.

In arriving at the final base transaction time for scanning, an adjustment is made to account for circumstances in which the barcode cannot be scanned. A delivery confirmation scanner may be unable to read a DC barcode (for example, if the barcode is applied on an uneven surface). In such a case, the carrier or clerk must manually enter the barcode ID number into the scanner. In the event that a scanner is not functioning at all, the carrier must record the delivery information manually on a PS Form 3849 and enter the information manually into a functioning scanner upon returning to the delivery unit. The calculations to arrive at this adjustment factor are presented in USPS-LR-I-108, p.8.

Window acceptance costs for retail delivery confirmation service have been adjusted in this testimony to account for the 22.6 percent of retail DC volume that

are entered by mailers into collection boxes rather than at the window. The window acceptance scans are bypassed for these pieces.

Retail delivery confirmation customers can receive delivery confirmation information through either the Internet or the corporate call management (CCM) system. Within the CCM system, information is provided two ways: (1) the interactive voice response (IVR) system and (2) customer service agents. The Postal Service has recently purchased its own IVR system, which eliminates certain base charges from the previous vendor-provided system. This testimony has also applied to the call center costs a higher proportion of customers placing calls to the call center.

C. Results

Table 1 presents the total test year volume variable costs for Priority Mail base electronic service, Priority Mail retail service, Standard (B) electronic service, and Standard (B) retail service. For each service type, the volume variable costs are presented by cost category and in total. For Priority Mail delivery confirmation service, this testimony also presents the cost net of Priority Mail electronic service cost. This cost difference is provided since the Priority Mail delivery confirmation fees exclude the underlying costs of Priority Mail electronic service. Instead, these underlying costs are included in the costs of the Priority Mail subclass.

Table 1: Test Year Delivery Confirmation Unit Volume Variable Costs

Cost Category	Priority Mail Base Electronic	Priority Mail Retail	Standard Mail Electronic	Standard Mail Retail
Acceptance	$0.00	$0.20	$0.00	$0.20
Delivery	$0.16	$0.16	$0.16	$0.16
Postmasters	$0.00	$0.002	$0.001	$0.003
Corporate call management	$0.00	$0.13	$0.00	$0.13
Information systems	$0.005	$0.004	$0.005	$0.004
Supplies	$0.00	$0.009	$0.00	$0.009
Total volume variable cost	$0.17	$0.52	$0.17	$0.52
Less: Priority Mail Base cost	$0.17	$0.17	N/A	N/A
Net volume variable cost	**$0.00**	**$0.35**	**$0.17**	**$0.52**

IV. SIGNATURE CONFIRMATION

A. Overview

Signature confirmation is a new special service which provides the mailer with access to delivery confirmation information and a copy of the addressee's signature upon request. Like delivery confirmation, signature confirmation is available only at the time of mailing and is available in one of two forms: the electronic option and the retail (or manual) option. In the electronic option, the mailer is required to apply a delivery confirmation barcode to the mailpiece and submit an electronic manifest of the mailing of DC items to the Postal Service. Eligible matter for the signature confirmation service includes Priority Mail and Standard Mail (B).

This testimony bases signature confirmation costs on delivery confirmation costs. Some cost components are modified to reflect operational differences between signature confirmation and delivery confirmation. Specifically, the signature confirmation operations during delivery and provision of information to customers differ from those of delivery confirmation.

B. Methodology

The primary difference between delivery confirmation and signature confirmation is that signature confirmation requires collection of the addressee's signature.

Therefore, the operational process of signature confirmation includes acquiring the addressee's signature on a PS Form 3849, scanning the PS Form 3849 barcode, optically scanning the hardcopy signature into an electronic database, and providing a facsimile of the signature to the customer upon request.

As with delivery confirmation electronic service, signature confirmation electronic service causes no additional acceptance costs. The mailer applies the barcoded ID label to each item and generates an electronic record of these items prior to acceptance. Acceptance costs for signature confirmation retail service are assumed to be the same as acceptance costs for delivery confirmation retail service, since the underlying operational activities are identical.

The delivery function is different in signature confirmation than in delivery confirmation. The need to obtain the addressee's signature causes the carrier to go to the door, wait for the addressee and obtain the signature. The cost of these additional activities is estimated by calculating the unit delivery cost for certified mail (which requires a signature) and subtracting the unit delivery cost of Priority mail (which represents the costs of delivering the host mailpiece). See USPS-LR-I-108, p. 28, for the detailed calculations.

The base transaction times for scanning, as reported in the delivery confirmation study (see USPS-LR-I-108, p. 9), have been adjusted to reflect other differences in the delivery function for signature confirmation. In addition to the 2.46

seconds of scan time for the mailpiece barcode in the delivery confirmation service, another 2.46 seconds has been added for the scan time of the PS Form 3849 barcode. In addition, the time to return the scanner is included in the analysis, but not the time to retrieve the scanner since this activity can be performed while the carrier is waiting for the addressee.

After the signature is obtained and the PS Form 3849 barcode is scanned with the hand-held scanner, the PS Form 3849 is optically scanned at a Computerized Forwarding System (CFS) unit. The signature is stored electronically, thus making signature retrieval more efficient. The calculation of the volume-variable cost of electronic filing of the signature is presented in USPS-LR-I-108, p. 30.

In providing confirmation to mailers, there will be two differences from delivery confirmation service. First, in addition to requesting information about the date and time a mailpiece was delivered (as with the delivery confirmation service), the mailer may also choose to request a copy of the signature of the addressee. For each signature request, the Postal Service will incur additional cost to retrieve the signature and send it to the mailer via fax or mail. The Postal Service will only provide a copy of the date and time of delivery, or a signature, to those mailers that make a specific request.

Second, electronic mailers requesting a copy of a signature can make the request via the call center. The unit volume variable cost for the electronic service is detailed in USPS-LR-I-108, p. 31 and the unit volume variable cost for the manual service is detailed in USPS-LR-I-108, p. 32.

C. Results

Table 2 presents the total volume variable costs for Priority Mail electronic service, Priority Mail retail service, Standard (B) electronic service, and Standard (B) manual service. For each service type, the volume variable costs are presented by cost category and in total. For Priority Mail signature confirmation service, this testimony also presents the cost net of Priority Mail delivery confirmation electronic service cost.

Table 2: Test Year Signature Confirmation Unit Volume Variable Costs

Cost Category	Priority Mail Electronic	Priority Mail Manual	Standard Mail Electronic	Standard Mail Manual
Acceptance	$0.00	$0.20	$0.00	$0.20
Delivery	$1.15	$1.15	$1.15	$1.15
Postmasters	$0.007	$0.009	$0.007	$0.009
Electronic filing	$0.02	$0.02	$0.02	$0.02
Corporate call management	$0.002	$0.14	$0.002	$0.14
Information systems	$0.005	$0.004	$0.005	$0.004
Supplies	$0.00	$0.009	$0.00	$0.009
Total volume variable cost	$1.18	$1.54	$1.18	$1.54
Less: Priority Mail Base cost of Delivery Confirmation {Refer to Table 1}	$0.17	$0.17	N/A	N/A
Net volume variable cost	**$1.01**	**$1.37**	**$1.18**	**$1.54**

V. ACCOUNTABLE MAIL COST UPDATES

A. Overview

This testimony updates the costs of various accountable mail and related services, including certificate of mailing, insured mail, bulk insurance, restricted delivery, and return receipts. Also, the impact of electronic signature capture on cost is estimated for the following services: certified mail, COD, insured mail, registered mail, return receipt and return receipt for merchandise.

B. Methodology

Updated wage rates and piggyback factors, which reflect indirect attributable cost, have been applied for each of the accountable mail cost updates. The return receipt cost study updates the labor times for clerk and carrier review activities, using the results of a new special study (see USPS-LR-I-108, p. 72). An additional update involves the weighting factor applied to the cost of return receipts which require a record of the address of delivery. This weighting factor is based on the 2.72 percent of total mail volume that is undeliverable as addressed (see USPS-LR-I-110, Table 4-2). For return receipts after mailing, I have updated the retrieval time to reflect the cost savings from electronic signature capture. For return receipt for merchandise, a new methodology is used which bases such costs on the costs of certified mail, since the operations are similar.

Electronic signature capture will impact the costs of various accountable mail services, including certified mail, COD, insured mail, registered mail, return receipt and return receipt for merchandise. The electronic signature capture operation, scheduled to begin in FY 2000, will change three operational functions under the current manual process. First, the Postal Service Form 3849 barcode will be scanned at delivery using a hand-held scanner. Second, the Form 3849 will be electronically filed using an optical scanner. Third, retrieval of Form 3849 will occur electronically. This testimony estimates the impact on cost of each accountable mail service by estimating the cost impact on each function as described above: delivery, filing, and retrieval. See USPS-LR-I-108, pp. 58-61 for the detailed calculations.

C. Results

Table 3 provides a summary of the test year volume variable costs of various accountable mail services.

TABLE 3: Test Year Unit Volume Variable Costs for Accountable Mail and Related Services

SERVICE	COST
CERTIFICATE OF MAILING	
INDIVIDUAL PIECES	
FORM 3817, ORIGINAL (NO DUPLICATE)	$ 0.59
FORM 3817, DUPLICATE	$ 0.47
FORM 3877, ORIGINAL - 13 PIECES (COST PER PIECE)	$ 0.20
BULK QUANTITIES	
FORM 3606, ORIGINAL - FIRST 1000 PIECES	$ 2.89
EACH ADDITIONAL 1000 PIECES	$ 0.29
FORM 3606, DUPLICATE	$ 0.39
INSURANCE	
AVERAGE FOR ALL VALUES	$ 1.68
AVERAGE FOR UNNUMBERED	$ 1.26
AVERAGE FOR NUMBERED	$ 1.99
VOLUME VARIABLE COST DIFFERENTIAL	$ 0.73
BULK INSURANCE COST SAVINGS - per NUMBERED piece	$ 1.35
BULK INSURANCE COST SAVINGS - per UNNUMBERED piece	$ 0.95
RESTRICTED DELIVERY	$ 1.99
RETURN RECEIPTS	
NON-MERCHANDISE	$ 1.26
AFTER MAILING	$ 2.23
MERCHANDISE	$ 2.27

VI. ON-SITE METER SERVICE

A. Overview

Under the on-site meter service program, qualified Postal Service employees may set or examine postage meters at a licensed customer's place of business for a fee. This program also allows a meter manufacturer to have qualified Postal Service employees check meters into and out of service at the meter manufacturer's place of business (also known as a direct distribution center, or DDC) for a fee.

There are two types of postage meters: (1) remote-set electronic meters and (2) manual-set electronic meters. Currently, over 90 percent of postage meters in use are remote-set electronic meters. This represents a shift away from manual-set and mechanical meters. The Postal Service recently decertified mechanical meters in order to improve the security of meter devices and to protect postage revenues. On December 31, 1998, the Postal Service decertified all high-speed mechanical postage meters. On March 31, 1999, the Postal Service decertified all other mechanical meters.

A new cost study has been performed to reflect both operational changes and new information. The changing population of postage meters has driven the change in operations and cost. Remote settings of postage meters involve an electronic transaction between the licensed customer and the meter

manufacturer. The Postal Service has no operational role in such transactions and therefore incurs no cost for such settings. For manual meters, however, a postal clerk performs the setting and/or examination. Check-in and check-out for both categories of meters involve postal clerks, except for "Secured Postage" meters, as discussed below.

Two sources of data were used to determine current on-site meter service costs. A field study was conducted to determine the costs of setting and examining meters on the premises of licensed customers. To calculate the costs of performing check-in and check-out service at the DDCs, productivity data for several DDCs were used. More information about the survey and productivity data is included in USPS-LR-I-108.

B. Methodology

In order to update costs of setting and examining meters at a licensed customer's place of business, a survey was sent to meter clerks at 60 field offices that perform on-site meter service. Clerks were instructed to complete the survey for every visit made to a customer facility to perform on-site meter service, over a one-month period. 32 sites, representing every Area Office of the Postal Service, provided useable data. The survey represents over 140 observations (visits to customer facilities) and over 600 meters reset and examined on-site.

Costs are categorized as either stop-variable access costs or meter-variable costs. Stop-variable access costs are variable only with respect to the number of stops (or visits) made to a customer's premises to provide the service; these costs are fixed with respect to the number of meters serviced at any one customer location. Stop-variable access costs include the time the clerk travels to and from the customer's location, and transportation costs, including mileage, public transportation, and public parking.

The meter-variable costs for performing meter resetting and examination were also updated using the survey results. The meter-variable cost is based on the service time required to reset and examine each meter. The cost for each meter checked into or out of service is calculated using productivity information reported by the DDCs. See USPS-LR-I-108, p. 74.

C. Results

Costs for check-in and check-out service have decreased in recent years. The enhancements in meter technology and the Postal Service's decertification of mechanical meters as of March 31, 1999 have produced efficiency gains. Checking meters into and out of service used to require postal employees to inspect the meters' registers, keys, seals, screws, and other features. Because of the enhanced meter technology and advanced security features, checking meters into and out of service now requires less labor intensive activities.

The testimony of witness Mayo (USPS-T-30) proposes the elimination of fees for "Secured Postage" type meters. To qualify as a "Secured Postage" meter, the meter must have the following characteristics: (1) includes a postal security device, (2) prints information based indicia, and (3) is remotely set. Because of the enhanced security that these meters provide, they do not require labor intensive activities during installation or withdrawal. Therefore, these meters do not have significant check-in/out costs.

A summary of the costs for providing on-site meter service is presented in the table below.

Table 4: Test Year Unit Volume Variable Costs for On-Site Meter Service

Type of OSMS Service Call	Unit Volume Variable Cost
Access Cost	$ 24.88
Each Meter Reset and/or Examined	$ 3.26
Each Meter Checked In or Out of Service	$ 2.46

VII. POST OFFICE BOX KEY AND LOCK CHANGES

A. Overview

Post office box customers may request additional keys to their post office box and may request that the lock on their box be changed after they begin using it. In providing either of these ancillary services, the Postal Service incurs cost. This testimony presents test year cost estimates for each of these two services.

B. Methodology

A special study was conducted to estimate these costs. A field survey was distributed to thirty randomly selected post offices. Over a one-month period, selected offices collected data on the number of post office box keys ordered and the time required to perform the activity, as well as the number of post office box locks changed and the time required to perform the activity. These productivity data were used to estimate labor costs for these activities.

The window acceptance labor costs for fielding the customer-initiated requests are based on the 1997 Window Transaction Time Study, as presented in witness Brehm's testimony in Docket No. R97-1 (USPS-T-21). The material and distribution costs for post office box keys were reported by the Mail Equipment Shops. Based on the results of the field survey, post office box lock changes are performed using locks in a given post office's preexisting inventory. Therefore,